

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
29 September 2005 (29.09.2005)

PCT

(10) International Publication Number
WO 2005/090577 A1

(51) International Patent Classification⁷: 15/70, 9/88, C12P 7/42, 13/02

C12N 15/52,

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/EP2005/001688

(22) International Filing Date: 18 February 2005 (18.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10 2004 013 843.5 20 March 2004 (20.03.2004) DE

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): DEGUSSA AG [DE/DE]; Bennigsenplatz 1, 40474 Düsseldorf (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): VERSECK, Stefan [DE/DE]; Alicestrasse 8, 63456 Hanau (DE). OSSWALD, Steffen [DE/DE]; Landwehrstrasse 33, 63517 Rodenbach (DE). PHONG, Wai-Yee [SG/SG]; Blk 56, Sims Drive, #09-1089, SG-380056 (SG). LIEBETON, Klaus [DE/DE]; Heinrichstrasse 2a, 64673 Zwingenberg (DE). ECK, Jürgen [DE/DE]; Jakobsweg 48, 64625 Bensheim (DE).

(74) Common Representative: DEGUSSA AG; Intellectual Property Management, Patente und Marken, Standort Hanau, Postfach 13 45, 63403 Hanau (DE).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/090577 A1

(54) Title: EXPRESSION OF NITRILLE HYDRATASES IN A TWO-VECTOR EXPRESSION SYSTEM

(57) Abstract: The present invention relates to a novel system for expressing nitrile hydratase. In this system, the nitrile hydratases, which are composed of subunits, are formed such that the respective subunits are located on different plasmids and are expressed simultaneously in *E. coli*.